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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,360	06/09/2006	Akihiko Sugiyama	040447-0283	1660
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EXAMINER BORSETTI, GREG				
ART UNIT		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/582,360

**Applicant(s)**

SUGIYAMA ET AL.

**Examiner**

GREG A. BORSETTI

**Art Unit**

2626

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 60-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 60-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date 7/2/2009.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. Claims 60-75 are pending.
2. Claims 60-63, 65-67, 69, 72-75.
3. Claims 53-59 have been withdrawn and were considered canceled as of the Final Office Action dated 3/4/2009. Applicant should formally cancel claims 53-59 from consideration subsequent this Office Action.

***Continued Examination Under 37 CFR 1.114***

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/4/2009 has been entered.

***Response to Arguments***

5. As per the argument provided in the amendments after final dated 7/2/2009, refer to the advisory action (7/10/2009).

***Information Disclosure Statement***

6. The Information Disclosure Statement (IDS) submitted on 7/2/2009 is in

compliance with the provisions of 37 CFR 1.97.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim(s) 60-66 are rejected under 35 USC 101 for being nonstatutory. Under the most recent interpretation of the Interim Guidelines regarding 35 U.S.C.101, a method claim must (1) be tied to another statutory class or (2) transform underlying subject matter to a different state or thing. If no transformation occurs, the claim(s) should positively recite the other statutory class to which it is tied to qualify as a statutory process under 35 U.S.C. 101. As for guidance to areas of statutory subject matter, see 35 U.S.C. 101 Interim Guidelines (with emphasis of the Clarification of "processes" under 35 USC 101); As an example, the claim(s) could identify the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed. Although the claim language of independent claim 60 includes "units", the specification, Page 41, lines 14-16, states "The functions of the information processing means, 15 information changing means and overall control unit of this apparatus can be implemented by the software installed in a personal computer." Therefore, the units are interpreted as software units and the claims are more directed to a non-statutory software embodiment than a statutory embodiment.
8. Claims 67-72 are also rejected under 35 USC 101 for being nonstatutory.

Although independent claim 67 describes system type elements, the units as described in the specification, Page 41, lines 14-16 are software (see above). Therefore, the units are interpreted as software units and the claims are more directed to a non-statutory software embodiment than a statutory embodiment.

9. Claims 74 is also rejected under 35 USC 101 for being nonstatutory. Although claim 74 describes system type elements, the units as described in the specification, Page 41, lines 14-16 are software (see above). Therefore, the units are interpreted as software units and the claims are more directed to a non-statutory software embodiment than a statutory embodiment.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 60-64, 66-70, 72-75 are rejected under 35 U.S.C. 103(a) as being unpatentable by Gabai et al. (US Patent #6773344 hereinafter Gabai) in view of Shriberg et al. (NPL Document "Can Prosody Aid the Automatic Classification of Dialog Acts in Conversational Speech?")

As per claim 60, Gabai teaches the method comprising:

analyzing inputted text with an information analysis unit to determine information to be added comprising the steps of: (Gabai, column 43, lines 3-19, *...It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Gabai teaches the ability to read local or ancient languages, column 43, lines 20-34 where the scanner is an information analysis unit. Information to be added is appropriate to a given situation.)

selecting additional information in the selected category; an (column 43, lines 44-50, the translation of a menu gives additional information pertaining to the dishes, the inscription translation provides additional historical commentary.)

adding the additional information to the inputted text with a change processing unit; (Gabai, column 43, lines 3-19, *...It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Furthermore, column 43, lines 35-50 gives examples, one of which is that the user inputs a menu and then toy subsequently explains the cultural significance of the dishes. Figs. 14 and 70 show that the output can be processed and generated from the internal toy process or an external computer/server depending on the complexity of the input/operation.)

outputting the inputted text to which the information is added with an information reproducing unit. (Gabai, column 53, lines 26-36, *...Their response includes, but is not limited to sound (including voice)... Fig. 66, 8085)*

Gabai fails to specifically teach, but Shriberg teaches:

classifying the inputted text as one of a plurality of types of sentences;  
(Page 8, Table 1, there are dialog act classes that are identified)  
selecting a category of additional information related to the type of sentence; and  
(Gabai teaches providing additional information about analyzes text through the toy.  
Shriberg, Page 8, Table 1, teaches that there are categories defining additional  
information relating to the type of sentence such as declarative, yes/no questions to  
establish better dialog interaction between the user/machine.)

It would have been obvious to someone of ordinary skill in the art at the time of  
the invention to combine Shriberg with Gabai because "identifying whether an utterance  
is a statement, question, greeting, and so forth is integral to understanding and  
producing natural dialog." (Page 4, top of page) Therefore, it is intergral in improving  
dialog systems to advance human/machine interaction. Furthermore, it would have  
advantageous to include prosodic information for classification of utterances "since the  
same sequence of words can have different meanings depending, in part, on prosody."  
(Page 5, ¶ 3) as taught by Shriberg.

As per claim 61, claim 60 is incorporated and Gabai teaches:

wherein the inputted text is translation text that is translated from a first language  
to a second language with an automatic interpretation unit. (Gabai, column 43,  
lines 3-19, Figs. 58 A-B teach that the toy interprets the scanned information in a  
language not native to the user for the user's understanding.)

As per claim 62, claim 60 is incorporated and Gabai teaches:

wherein a voice synthesis unit converts the inputted text to which the information is added to a voice signal and outputs the voice signal. (Gabai, column 20, lines 14-36, *...transfer information to the user through sound (possibly using text-to-speech technology)...*)

As per claim 63, claim 60 is incorporated and Gabai teaches:

wherein amount of information to be added is determined on the basis of an analysis result. (Gabai, column 43, lines 44-50, *...translating an ancient inscription a toy offers its user a historical commentary on the period and the occasion on which it was written and the subjects it concerns...*, There is inherently a determined amount of available additional information because the database stores available additional information in the database that is retrieved based upon the analysis.)

As per claim 64, claim 60 is incorporated and Gabai teaches:

where the information is prestored corresponding to a keyword. (Gabai, column 46, lines 40-67, the toy listens for keywords in its analysis to understand the input and produce the appropriate response. Also, example II (columns 45-46) shows that the information is related to the input keywords.)

As per claim 66, claim 62 is incorporated and Gabai teaches:

wherein the information is information for prompting a target.



(Gabai, columns 45-46, Example II, teaches that information is added for prompting a target using voice, column 46, lines 1-5).

As per claim 67, Gabai teaches:

an information changing unit for receiving inputted text (Gabai, column 43, lines 20-34, ...*special scanner...*)

analyzing the inputted text to determine information to be added and adding the information to the inputted text (Gabai, column 43, lines 3-19, ...*It is preferred, in such cases, that a toy not merely translate but combine its translations with other types of content that is appropriate to the given situation...* Furthermore, column 43, lines 35-50 gives examples, one of which is that the user inputs a menu and then toy subsequently explains the cultural significance of the dishes.)

and an information reproducing unit for converting and output from the information changing unit to voice. (Gabai, column 53, lines 26-36, ...*Their response includes, but is not limited to sound (including voice)...*)

Claims 68, 69 are rejected for the same reasons as claims 61, 63.

As per claim 70, claim 67 is incorporated and Gabai teaches:

wherein the information changing unit comprises a memory unit for storing the information corresponding to a keyword, extracts the keyword from the inputted text and selects the information stored into the memory unit on the basis of the extracted

keyword. (Gabai, column 46, lines 40-67, the toy listens for keywords in its analysis to understand the input and produce the appropriate response. Also, example II (columns 45-46) shows that the information is related to the input keywords.)

Claim 72 is rejected for the same reasons as claims 66.

Claims 73-75 are rejected for similar reasons to claims 60 and 67. Claim 73 is the computer readable medium claim for the method of claim 60. The apparatus in claim 67 has been shown to be a computer based apparatus which inherently has to be programmed and executed from a computer-readable medium. Claims 74-75 are the terminal and server claims for the method and apparatus of claims 60 and 67. Gabai teaches that the toy can use cellular technology which is well known in the art to be able to independently process input as well as process the input through a server.

11. Claims 65 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable by Gabai et al. (US Patent #6773344 hereinafter Gabai) in view of Shriberg et al. (NPL Document "Can Prosody Aid the Automatic Classification of Dialog Acts in Conversational Speech?") and further in view of Uwakubo. (US Patent #6513011).

As per claim 65, claim 62 is incorporated and Gabai and Shriberg fail to specifically teach, but Uwakubo teaches:

further comprising analyzing reaction time of a target for which the voice is output

(Uwakubo, columns 7-8, lines 63-67 and 1-8, ...*a time period is clocked in some times, from a time when a reaction is presented to the output unit 360 (to the user) to another time when the user starts action in response to the presented reaction...*)

and determining the information on the basis of the analysis result with an information analysis unit.

(Uwakubo, column 8, lines 21-31, ...*generate reactions or suspends the generating of the reactions, based on instructions from the conversation manage unit 330... A reaction is generated based upon the reaction time of the user.*)

It would have been obvious to someone of ordinary skill in the art at the time of the invention to combine Uwakubo with the Gabai and Shriberg device because "prior devices can not follow changes of a length of a pause (timing) in a conversation"

(Uwakubo, column 1, lines 38-42) The combination of Uwakubo with the Gabai and Shriberg device would have been obvious to try because it improves smooth information transition and has a reasonable expectation of success.

Claim 71 is rejected for the same reasons as claim 65.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to PTO-892, Notice of References Cited for a listing of analogous art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREG A. BORSETTI whose telephone number is (571)270-3885. The examiner can normally be reached on Monday - Thursday (8am - 5pm Eastern Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHEMOND DORVIL can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg A. Borsetti/  
Examiner, Art Unit 2626

/Talivaldis Ivars Smits/  
Primary Examiner, Art Unit 2626

10/20/2009